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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,742	10/22/2003	Peter Michael Baumgart	HSJ920030149US1	7763

7590 07/12/2005  
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EXAMINER

MERCEDES, DISMERY E

ART UNIT PAPER NUMBER

2651

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/691,742

**Applicant(s)**

BAUMGART ET AL.

**Examiner**

Dismery E. Mercedes

**Art Unit**

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 is/are allowed.
- 6) ☒ Claim(s) 16,20-22 is/are rejected.
- 7) ☒ Claim(s) 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2005 and 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 3/28/2005 disclaiming the terminal portion of any patent granted on Application Number which would extend beyond the expiration date of 20050088769 A1, serial number 10/691,742, has been reviewed and is accepted. The terminal disclaimer has been recorded.
2. The assignment document filed on 3/28/2005 is acceptable as the documentary evidence required by 37 CFR 3.73. If the assignment document is not already recorded with the United States Patent and Trademark Office, it is suggested that the assignment document be submitted for recording among the Office assignment records. See 37 CFR 3.11 and MPEP § 302.

### ***Response to Arguments***

3. Double Patenting Rejection with regards to claims 1-22 is withdrawn.
4. Applicant's arguments see page 5, second paragraph of Applicant Remarks, filed 3/28/2005, with respect to claims 1,4, 10-12 have been fully considered and are persuasive. The 103(a) rejection of claims 1,4, 10-12 has been withdrawn.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 16, 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Feng et al. (US 6,529,342 B1).

Feng et al. discloses, detecting a level of interference between the slider body and the hard disk; and applying a predetermined bias voltage between the slider body and the hard disk, the predetermined bias voltage including a DC component and being based on the detected level of interference between the slider body and the hard disk (col.4, lines 39-41, 52-67; col.5, lines 13-15; col.6, lines 6-25; 42-51).

As to Claims 20 and 21, Feng et al. further the predetermined bias voltage is applied to the slider body with respect to the hard disk and applied to the hard disk with respect to the slider body (col.4, lines 60-63; as depicted in Figure 3).

As to Claim 22 Feng et al. further discloses the bias voltage source controls a magnitude of the predetermined voltage based on the detected flying-height spacing of the slider body (col.4, lines 33-38, col.5-col.6, Figures 4-12).

#### ***Allowable Subject Matter***

7. Claims 1-15 are allowed.

Independent Claim 1, is allowed over Prior Art, since the cited references taken alone or in combination do not teach or suggest *the predetermined bias voltage including a DC component and AC component and being based on the detected flying-height spacing of the slider body.*

Independent Claim 15, is allowed over Prior Art, since the cited references taken alone or in combination do not teach or suggest *detecting a minimum variation of current that flows on and off the slider body as the DC bias voltage is varied; and applying a DC bias voltage corresponding to the variable DC bias voltage*

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*applied between the slider body and the hard disk when the minimum variation of current that flows on and off the slider body is detected.*

8. Claims 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Muranushi et al. (US 5,153,785); Meyer et al. (US 6,577,466 B2) ; Chapin et al. (US 6,785,081 B2) ; Boutaghou et al. (US 6,888,693 B2) ; Riddering et al. (US 2003/0043497 A1); Riddering et al. (US 6,700,724 B2)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dismery E Mercedes  
Examiner  
Art Unit 2651

DM



DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
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